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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,140	11/04/2003	Tongbi Jiang	303.343US9	4829

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EXAMINER	
LAMB, BRENDA A	

ART UNIT	PAPER NUMBER
1734	

DATE MAILED: 03/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/701,140	JIANG ET AL.	
	Examiner	Art Unit	
	Brenda A. Lamb	1734	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11/25/2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

The terminal disclaimer filed 11/25/2005 is proper.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cairncross et al in view of Hefele.

Cairncross et al teaches a stencil comprising: a metal stencil pattern having at least one opening formed therein; a coating applied to the opposite surface of the stencil pattern and having a surface tension less than the surface tension of the stencil pattern (a polymeric material). Cairncross et al fails to teach a coating applied to one surface of the stencil and one or more side surfaces of the stenciling openings and having a surface tension greater than the surface tension of the metal stencil pattern.

However, Helefe teaches the design of a stainless steel stencil pattern having a coating on one side of the stencil and the side wall of the opening the stencil and the coating is known to have a surface tension greater than the stencil pattern. It is the examiner's position that diamond has a greater surface tension than stainless steel because diamond is a hard, wear-resistant material similar to those materials with those materials having greater surface tensions taught by applicant's specification (at paragraph 0035-0036). Therefore, it would have been obvious to modify the Cairncross et al stencil having a polymeric ledge on one surface of the metal stencil pattern having at least one opening formed therein by providing a coating on the opposite surface of the stencil pattern and an opening of the stencil such as taught by Hefele for the obvious reason to increase the wear resistance of the stencil. Thus claims 1 and 4 are obvious over the above cited references. With respect to claim 2, Cairncross et al fails to teach the stencil pattern is a stainless steel. However, Hefele et al teaches the stencil pattern is a stainless steel. Therefore, it would have been obvious to use stainless steel as the material of construction of the Cairncross et al metal stencil since the use of stainless steel as the stencil pattern for a coated stencil is known as taught by Hefele.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cairncross et al in view of Hefele and Mehregany et al.

Cairncross et al and Hefele are applied for the reasons noted above but Hefele fails to teach the wear resistant coating is within the scope of claim 3. However, it would have been obvious given the modifications of the Cairncross et al stencil as discussed above to provide as the wear resistant coating on the upper surface of the stencil and

the stencil opening another wear resistant coating such as taught by Mehregany et al (see column 4 lines 23-29) for the obvious reason to expect similar results that is a hard wear resistant surface.

Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is confusing due to a typographical error. It is suggested that applicant at line 4 of claim 1 after "at least of the stencil" and insert – pattern --.

Any inquiry concerning this communication should be directed to Brenda A. Lamb at telephone number (571) 272-1231.

Brenda A Lamb
Examiner
Art Unit 1734